

501, 232  
Rec'd PCT/PTO 12 JUL 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 January 2004 (22.01.2004)

PCT

(10) International Publication Number  
**WO 2004/007051 A1**

(51) International Patent Classification<sup>7</sup>: **B01D 35/00**

(21) International Application Number:  
PCT/IN2002/000149

(22) International Filing Date: 11 July 2002 (11.07.2002)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **GEA ENERGY SYSTEM (INDIA) LTD** [IN/IN]; 443, Anna Salai, Teynampet, Chennai 600 018, Tamil Nadu (IN).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BALAKRISHNAN GOVINDASAMY**, Raghupathy [IN/IN]; 100, IV Street, Abiramapuram, Chennai 600 018, Tamil Nadu (IN).

(74) Agents: **DEPENNING RG** et al.; Depenning & Depenning, 31 South Bank Road, Chennai 600 028, Tamil Nadu (IN).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

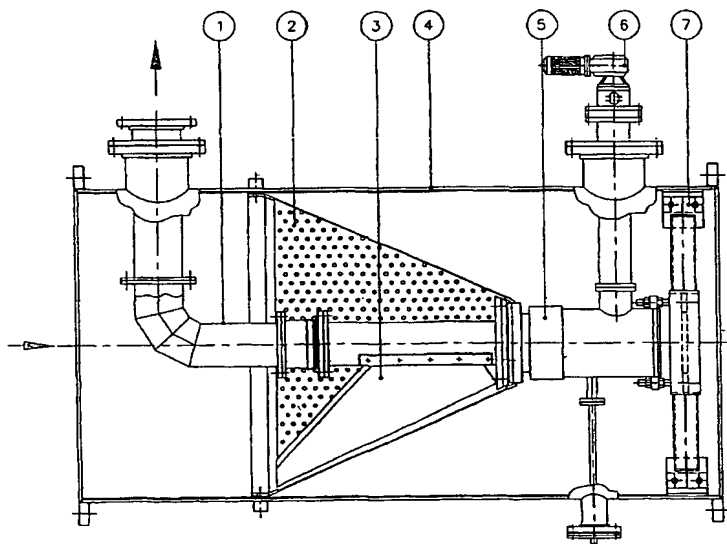
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A DEBRIS FILTER WITH A ROTATING DEBRIS EXTRACTOR



(57) Abstract: A filter for filtering solid particles from liquids, especially for use in steam condensers and heat exchanger in thermal and nuclear power plants, said filter comprising a housing (4), a screen basket (2) located within said housing (4), a debris discharge pipe (1) for discharging accumulated and captured debris; a debris extractor arm (3) with a curvature towards the screen extending outwards at a predetermined radius with respective vertical plane, the said debris extractor arm (3) being rotatably driven over the entire length of the screen to create a low pressure between the debris extractor arm (3) and the screen (4) for complete extraction of debris and conveying to said debris discharge pipe (1).

WO 2004/007051 A1